Summary of Completed 319(h) Projects

Seven projects were completed this year. Combined these projects provided $1,363,636 worth of matching funds and in-kind services.

Oahu Project:

- From the Land to the Sea: A School and Community Education Initiative

Maui Project:

- Upcountry Maui Sediment and Runoff Control

Molokai Projects:

- Manawainui Watershed Improvement Project
- Wai'ahewahewa Watershed Project

Statewide Projects:

- Farm*A*Syst/Home*A*Syst: Development of a Farm and Home Pollution Assessment
- HACD Water Discretionary Grant
- Livestock Residual Technology Transfer and Pollution Prevention

Farm*A*Syst/Home*A*Syst: Development of a Farm and Home Pollution Assessment

Contractor: University of Hawaii at Manoa, College of Tropical Agriculture and Human Resources (CTAHR)

Project Period: October 1997 through December 2000

Federal Funds: $83,597 **Matching Funds:** $66,322

Project Purpose/Goal: To produce and pilot test a localized version of the national Farm*A*Syst/Home*A*Syst (FAS/HAS) education and pollution assessment materials and to increase public awareness of polluted runoff issues.

Implementations: This project created and distributed a local pollution assessment tool, Hawaii's Pollution Prevention Information (HAPPI) material, that can be utilized by the public to help reduce the amount of nonpoint source pollution that runs off of their land. Material information encompasses areas from safe disposal of hazardous products to nutrient management.

Distribution of Hawaii's Pollution Prevention Information (HAPPI) materials continue under a current 319(h) project.

HACD Water Quality Discretionary Grant

Contractor: Hawaii Association of Conservation Districts

Project Period: July 1997 through December 2000

Federal Funds: $40,000 **Matching Funds:** $163,283

Project Purpose/Goal: To organize and convene statewide workshops and conferences on non point source pollution, provide technology transfer, and support implementations of Memorandums of Understanding (MOUs) with other state, federal, and local agencies and entities.

Implementations: The 2000 Hawaii Water Quality Conference was held on November 29, 30, and December 1, 2000. Over 140 people attended representing a cross-section of federal, state, and county government agencies, educational institutions, and various community groups.

Since the completion of this project, HACD and DOH have signed another contract addressing nonpoint source pollution.

Manawainui Watershed Implementation Project

Contractor: Molokai-Lanai Soil and Water Conservation District

Project Period: September 1997 through December 2000

Federal Funds: $53,604 **Matching Funds:** $37,478

Project Purpose/Goal: To reduce water quality impairments of Molokai's South Shore and Kualapuu Aquifer by limiting soil movement and attached chemicals through revegetation and educational efforts.

Implementations: The educational measures of this project were adopted so fully by the community that community leaders organized island wide meetings to initiate and apply for the USDA Empowerment Zone grant with the major focus to be Molokai's Environment and Water Quality. Furthermore, with vegetation being planted within a 1/2 acre plot, the project found that soil loss from that area was reduced by half.

The island of Molokai is known for its dry terrain.

Wai'ahewahewa Watershed Project

Contractor: Molokai-Lanai Soil and Water Conservation District

Project Period: May 1999 through February 2001

Federal Funds: $60,127 **Matching Funds:** $113,702

Project Purpose/Goal: To reduce soil erosion in the Wai'ahewahewa Watershed.

Implementations: The project was successful in installing over 16,000 ft of fencing to exclude livestock and wildlife from the project area, planting ground cover in steep and sloping areas, constructing terraces to eliminate gully development, and smoothing out the land to improve surface drainage. Overall, it is estimated that the project was successful in reducing soil loss by 382 tons per year.

The Wai'ahewahewa Watershed Project was successful in reducing soil erosion by 382 tons/yr.

Livestock Residual Technology Transfer & Pollution Prevention Education Program

Contractor: Hawaii Association of Conservation Districts

Project Period: May 1999 through May 2001

Federal Funds: $67,143 **Matching Funds:** $75,378

Project Purpose/Goal: To establish a program framework of information, education, and transfer of livestock waste management technology to reduce polluted runoff into streams and groundwater aquifers.

Implementations: Completed an inventory of all Confined Animal Feeding Operations (CAFO) in state, established an interagency Livestock Waste Management Committee, created an educational program involving applicable pollution prevention practices, and held two statewide workshops emphasizing the need to protect water quality limited segments.

The livestock industry has concerns with the new federal AFO/CAFO regulations.

Upcountry Maui Sediment and Runoff Control

Contractor: Central Maui Soil and Water Conservation District

Project Period: June 1999 through July 2001

Federal Funds: $98,027 **Matching Funds:** $96,853

Project Purpose/Goal: To help control runoff and minimize erosion by implementing Best Management Practices (BMPs).

Implementations: Diversions, settling basins, and a new "tire layout" BMP were installed to redirect runoff in manageable amounts, and modifications and improvements were also applied to already existing BMPs on the land. The "tire layout" BMP involved placing recycled car tires in the bottoms of waterways and ditches. However, among all of the results of this project, a CMSWCD representative says, " the most beneficial result of this project is the renewed interest and enthusiasm that I see in Maui Pine's employees."

The new "tire layout" BMP.

From the Land to the Sea: A School and Community Education Initiative

Contractor: Hawaii Nature Center

Project Period: July 1999 through July September 2001

Federal Funds: $ 115,206 **Matching Funds:** $ 128,802

Project Purpose/Goal: To implement programs to inform students and the community about their ability to influence the cleanliness of the watershed through their daily actions and decisions, particularly focusing on impacts of soil erosion and street generated runoff.

Implementations: The Hawaii Nature Center was able to conduct field programs targeted for the community at large addressing watershed health and nonpoint source pollution (NPS), revise their existing fourth grade program to include a component addressing Best Management Practices (BMPs) in forests, include the role of ground cover and land use in soil and water retention, develop and field test a program for fifth graders addressing the interaction between humans and the environmental coastal areas, and produce three public service announcements regarding NPS and BMPs.

Children participate in a hands-on approach to learning.